MassWildife Habitat Management Grant Program (MHMGP) Sample Proposal

1) Project Title and Abstract: Shrubland habitat creation at Back to Nature Farm

This site has been historically used by early successional and grassland bird species such as the American Woodcock and Bobolink. Over the past decade the abundance and presence of a number of these species have declined or disappeared. This project aims to expand and improve the habitat on the site for these bird species and for other species such as the New England Cottontail and the White-tailed Deer.

Habitats will be improved by reclaiming field edges, encourage the growth of regenerating aspen, and complement exists field and forest habitats by creating native shrub habitats. During the grant period, shrubs will be removed and invasive species treated along the 57 acre field edges to result in 60 acres of wildlife friendly agricultural fields in Area A. In Area B, all maples and large aspens will be removed resulting in 5 acres of regenerating aspen forest. Canopy trees will be removed and native shrubs will be retained in Area C creating a shrub habitat between the fields and forested wetland.

2) Applicant:

Jim Landowner
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Applicant Type: Individual Private Landowner

3) Property location and description:

This 126 acre piece of property is owned by Jim and Jen Landowner and is located at 1 Rabbit Hill Rd. on the northern border of Westborough, MA. The entire property is subject to a conservation restriction established in 2002 through the Forest Legacy Program. It is also enrolled in the Forest Stewardship Program and Chapter 61A. The property will be maintained into the foreseeable future for wildlife habitat, recreation, and forestry.

A Forest Stewardship Plan prepared in 2003 describes the property as being 57 acres of open agricultural land, 42 acres of sparse woods, and 22 acres of second growth forest. The 57 acre area is maintained as grassland with the warm season grasses being hayed by a local farmer. The 42 acre area of sparse woods is a forested wetland with a stand of quaking aspen, several seeps and a vernal pool complex. The 22 acre second growth forest is comprised of a mixture of hardwood trees such as red oak, sugar maple, and beech with shrubs including shadbush, witch hazel, maple-leaf viburnum, and beaked hazelnut.

The property is situated within close proximity to nearly 6,500 acres of undeveloped land including Wilderness State Park (1,450 acres), former farm land protected by the Westborough Trust (77-acres), and the Boston Reservoir (4,135 acres). The property directly abuts a 200 acre piece of forested parkland owned by the town of Northborough. Current and former agricultural land totaling about 500 acres is located within 1 mile of the property.

4) Size of the specific MHMGP project area(s) to be managed:

The MHMGP project areas will total 70 acres including the 60 acre area composed of 57 acres of grasses and 3 acres of invasive shrubs around the field edges, 5 acres of the 42 acre forested wetland and 5 acres of the 22 acre second growth forest. An additional 3 acres will be added to the 57 acre grassland to create a 60 acre area. The forested wetland will be improved by encouraging the growth of a 5 acre regenerating aspen stand. A 5 acre native shrubland will be created in the second growth forest.

The 57 acre grassland consists primarily of warm season grasses. The fields are relatively flat with some low lying areas creating wet meadow conditions in early spring. The soil, while wet in the spring, remains dry through most of the summer and fall. The fields were seeded with warm season grasses in 2003 and are mowed each July. Field edges are being invaded by non-native shrubs.

The 42 acre forested wetland remains wet most of the year. It is a low lying area dominated by sparse trees consisting mostly of quaking aspen and red maple. The area is not currently managed.

The area where native shrubs will be retained is currently part of the 22 acre second growth hardwood forest.

5) Species to benefit from the proposed project:

Birds observed using the fields in June of 2008 included Bobolink, Eastern Meadowlark, and Savannah Sparrow. American Woodcock were observed displaying in the field adjacent to the forested wetland in April of 2006 but have not been seen since. Blue-winged Warblers were observed in June of 2005 along the shrubby field edges and within the forested wetland.

The fields are mowed each year and kept suitable for the grassland species that use them. However, the field edges are becoming increasingly overgrown and dominated by invasive shrubs and can no longer be maintained with the landowner's current equipment. Moving back the edges and expanding the size of the fields to their original boundaries would be beneficial to the grassland breeding birds that use them. Creating an area consisting of native shrubs

between the fields and forested wetland to complement the forest and field habitats already existing on the property would benefit listed bird species that use shrub areas for breeding and during migration.

The American Woodcock and Blue-winged Warbler have been observed in the field and forested wetland during breeding season in past years. However, the density of trees has decreased and the size of trees gotten too large to serve as suitable habitat for these birds. Removing all red maples and larger aspens from the area would allow for aspen regeneration creating a denser stand of young trees and a habitat more suitable for listed birds.

The New England Cottontail also occurs in the area and this shrub habitat creation within the existing mosaic of habitat types on the property should benefit this species.

6) Specific management objectives and tasks:

- Goal 1: Area A, Reclaim field edges to expand native warm season grassland habitat
 - Objective 1: Increase the size of the field by 3 acres
 - Task 1: Remove woody vegetation along the field edges to original boundaries in Winter 2016
 - Task 2: Treat invasive shrub species in the cleared area in Spring 2016
 - Task 3: Seed reclaimed field edges with warm season grass mix in Spring 2016
 - Budget: \$5,718.99
- Goal 2: Area B, Encourage the growth of regenerating aspen in the forested wetland parcels
 - Objective 1: Create 5 acres area of regenerating aspen
 - Task 1: Remove all maples and large aspen in Winter 2016 following guidelines in Forestry Conservation Management Practices for Rare Species
 - Budget: \$6000.00
- Goal 3: Area C, Complement the existing field and forest habitats by adding a native shrub habitat
 - Objective 1: Create a 5 acre native shrub habitat adjacent to the fields and forested wetland
 - Task 1: Remove canopy trees and retain native shrubs in winter 2016
 - Mow on a 3-5 year rotation following the guidelines in Managing Grasslands, Shrublands and Young Forests for Wildlife: A Guide for the Northeast
 - Budget: \$10,500.00

7) Expected benefits to wildlife:

Reclaiming the field edges, planting warm season grasses, and mowing will benefit Bobolink, Eastern Meadowlark, and Savannah Sparrow by ensuring that the grasslands continue to be large enough for suitable nesting habitat. Maintaining these fields by mowing will also continue to provide habitat for grassland breeding birds across the landscape.

Creating a regenerating stand of aspen should bring American Woodcock back to the site to use the forested wetland as foraging habitat. The woodcock were observed displaying in the adjacent fields and with those areas still open, complemented by a young stand of aspen, several woodcock habitat requirements will be provided within close proximity.

The forested wetland and the shrub habitat along the field edges were once used by Blue-winged Warbler. A newly regenerating stand of aspen and a native shrub habitat should once again attract this species to the property. Managers of the Wilderness State Forest nearby completed a native shrub habitat project in 2010 and have reported the return of Blue-winged Warblers this breeding season.

The increase in acreage of quality early successional habitat on the site should benefit the New England Cottontail which occurs in the area.

8) Public benefit, outreach, and collaborations:

American Woodcock hunting was a popular activity on the site up until about a decade ago when the population declined due to habitat loss. This project should help restore the American Woodcock population and provide an increase in hunting opportunities for this species. White-tailed deer and turkey are also hunted at this site.

The local bird club visits the property each breeding season to view grassland nesting birds. With the creation the aspen regeneration and shrubland, birders will benefit from the ability to view a greater number of species during their visits.